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ABSTRACT

This examination of the concept of leadership in the context of a large science-engineering library focuses on the importance of communication as it explores relevant social and political factors from an administrative perspective. The paper begins with an overview of the services and collections of the science-engineering library. The nature of leadership, including the importance of vision and communication, is then considered. A discussion of the environment of the science-engineering library--academic departments, students, other library administrators, and professional associations--follows. Categories of leadership roles of the administrator of the major science-engineering library are outlined: interpersonal roles (figurehead, leader, and liaison); informational roles (monitor, disseminator, and spokesman); and decisional roles (entrepreneur, disturbance handler, resource allocator, and negotiator). It is concluded that, although the major science-engineering library is unique, it is a microcosm of the main library, and the basic administrative skills needed to administer primary activities and operations are similar for the directors of both libraries. (4 references) (MES)

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LEADERSHIP IN A MAJOR SCIENCE-ENGINEERING LIBRARY: SOCIAL AND POLITICAL FACTORS AND THE NEED TO COMMUNICATE

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Introduction

There are approximately twenty-five "major" science-engineering libraries in the United States. These libraries are relatively large, with 250,000 to 500,000 volumes. In one sense, they are "independent" institutions. In reality, they are usually one of several components in a complex library system. As a result of the size of the library and the relative position within a system of libraries, the administrator must be a leader who is able to communicate effectively. In this paper, the concept of leadership in a large science-engineering library will be examined. Relevant social and political factors are explored from an administrative perspective, with a focus on the importance of communication.

The Science-Engineering Library

One of the committees in the Science and Technology Section of the Association of College and Research Libraries (American Library Association) attempts to compare "stand-alone" science-engineering libraries. Statistical data on these libraries are collected and analyzed. These libraries provide an extensive array of bibliographic services for a sizable and sophisticated

clientele. Reference, online, and instructional services are offered to faculty and students. Collection development is another primary activity, with an emphasis on serial publications. Activities associated with faculty liaison promote effective collection development and provide essential feedback for practical administrative decisions.

With the current and continuing emphasis on science and technology, the demand for increasingly complex reference services in a major science-engineering library intensifies from year to year. A reference staff of four to eight professional librarians and several trained classified staff are available to provide reference assistance. Sophisticated online programs and services are utilized to enhance access to serials and conference proceedings. Faculty and students may access the periodical literature via mediated searching and a variety of end-user programs such as CAS Online or BRS AfterDark.

The collections are essential to research and teaching for all faculty members. In the scientific and technical disciplines, the emphasis on current bibliographic materials is accented as a result of research needs and pressures. Specifically, serials, proceedings of conferences and symposia, and annual reviews of the literature are perceived as critical by faculty members from scientific/technical academic departments. With the importance attached to the periodical literature, considerable concern is

being expressed over contemporary serials reviews and/or cancellations projects in many "main" and corresponding science-engineering libraries.

The Nature of Leadership

Stated in simple terms, leadership is a process of influencing human behavior. In Human Behavior At Work, Davis defines leadership as the "ability to persuade others to seek defined objectives enthusiastically." (Davis 1977, 107) This definition underscores the role of leadership in eliciting behavioral responses that are more than routine. In an organizational context, however, the full significance of leadership is not captured by this behavioral perspective. Organizations are goal-oriented and motivated by a sense of purpose. Leaders are placed in key positions to insure the achievement of organizational goals. Consequently, leadership is the process of influencing human behavior so that the goals of the organization are accomplished.

The effective leader operates at a level that is usually more complex and sophisticated than the comparable manager's level. A leader who becomes too involved with the "mundane tasks of organizational maintenance" will eventually fail to lead. According to Bennis, "Leadership is the capacity to infuse new values and goals into the organization, to provide perspective on

events and environments which, if unnoticed, can impose constraints on the institution." In addition, the leader is involved with "planning, auditing, communicating, relating to outside constituencies, insisting on the highest quality of performance and people, keeping an eye out for forces which may lead to or disable important reforms." Furthermore, "Once the leader gets sucked into the incredibly strong undertow of routine work, he is no longer leading, he is following, which he is not paid to do." (Bennis 1973, 83-84) Leadership requires a sense of vision. In addition to understanding the primary internal operations of the organization, the capable leader is able to interact with the organization's environment, deal with uncertainty, and consider options to decrease the level of uncertainty. The leader perceives what must be done. Then, he or she communicates relevant ideas and proposals to appropriate personnel who are prepared to develop and implement these recommendations. In a classic paper on the nature of leadership, Gardner elaborates on the importance of vision in leadership:

1. They think longer term - beyond the day's crises, beyond the quarterly report, beyond the horizon.
2. They look beyond the unit they are heading and grasp its relationship to larger realities - the larger organization of which they are a part, conditions external to the organization, global trends.
3. They reach and influence constituents beyond

> their jurisdictions, beyond boundaries....Their capacity to rise above jurisdictions may enable them to bind together the fragmented constituencies that must work together to solve a problem.
>
> 4. They put heavy emphasis on the intangibles of vision, values, and motivation and understand intuitively the nonrational and unconscious elements in the leader-constituent interaction.
> 5. They have the political skill to cope with the conflicting requirements of multiple constituencies.
> 6. They think in terms of renewal. The routine manager tends to accept the structure and processes as they exist. The leader or leader/manager seeks the revisions of process and structure required by ever-changing reality. (Gardner 1986, 8)

In an examination of the concept of leadership, the critical nature of communication is reflected in all facets. A leader is a communicator. He or she must be able to communicate with individuals and institutions. In addition, the ability to cope with an environment characterized by uncertainty is essential.

The Environment of the Science-Engineering Library

The administrator or director of a major science-engineering library needs to be an effective leader. This library exists as an open organization that interacts continually with its environment. As a leader, the administrator communicates with numerous individuals, formal and informal groups, and institutions. The capacity to serve a varied library clientele depends on the leader's communicative skills.

Who or what are the elements in the immediate environment of a large science-engineering library? First, a varied clientele requests bibliographic assistance with general and specific informational needs. As the majority of major science-engineering libraries are situated in relatively large academic institutions, a considerable number of faculty and students are requesting reference assistance. Approximately forty to fifty academic departments in the scientific and technical disciplines are served by the library. How are these academic units different from those in the humanities and the social sciences? They differ in the comparative emphases placed on ongoing research projects funded by both governmental and private agencies. Acquisition and application of research grants tend to "drive" activities in these departments. An appreciable measure of these research activities and projects are perceived to be on the "cutting edge" of science and technology. As a result of

this intense degree of scientific/technical sophistication, the bibliographic requirements of these faculty members focus on currency and speed of response. Current bibliographic materials are needed as soon as possible.

The effective library director communicates with the administrators of these academic departments to determine departmental requirements. Through an active program of faculty liaison, reference librarians interact with faculty members to determine bibliographic needs. Online services, so vital for immediate access to the scientific and technical periodical literature, are necessary elements in overall programs of reference, online, and instructional services.

Graduate and undergraduate students constitute another group in the library's environment. Standard reference services are critical for undergraduate students, as are instructional services. Graduate students, under a variety of pressures, seek any bibliographic assistance available. Those graduate students who become involved with faculty research projects will press for immediate assistance.

In addition to communicating with faculty and students, the director of the science-engineering library must communicate with other administrators within the library system. These individuals are responsible for the administration of other

important collections or libraries. Such collections may be more specialized, frequently representing a particular discipline or format. Common examples of discipline-related collections include architecture, music, and library science. Possible format-oriented collections include the map collection, media center, or the "special/archival" collection. The type and number of these collections or libraries will vary from one library system to another.

The administrators of all these library departments or units, including associate university librarians and the university librarian, are members of an administrative council. In addition to discussing policy and procedures, physical and human resources are deliberated and eventually allocated by the members of the administrative council. This is a political process that requires a fine sense of negotiation. The different administrators compete for limited resources. As many colleges and universities cope with adverse financial conditions, academic libraries are forced to deal with budgets perceived as less than adequate. The struggle for limited funding intensifies and, to a degree, politicizes the process employed to allocate essential resources.

In the deliberations over resource allocation, the administrator of the science-engineering library needs to "compete" effectively for available resources. Each member of the administrative

council seeks a specific portion of overall allocations. When staff requirements and collection development funds are deliberated, the director of the science-engineering library must articulate particular organizational needs. Major science-engineering libraries tend to be understaffed, relative to the main library. At the same time, all primary bibliographic services are provided in the science-engineering library. The possibility of additional staff, professional or classified, should be vigorously pursued. Similarly, sufficient funds for monographs and serials need to be allocated for the scientific and technical disciplines. As stated previously, serial titles are crucial to the clientele of the science-engineering library. This bibliographic requirement must be communicated to all administrative colleagues.

If faculty and students comprise one important element in the science-engineering library's environment and other library units, including the main library, constitute a second major element, then the professional associations make up a third significant element. Standards and criteria are established by organizations such as the American Library Association and the Special Libraries Association. In one sense, the large science-engineering library is a special library. Many of the reference librarians are active members of SLA. In the American Library Association, the Science and Technology Section is rapidly becoming one of the largest sections in the Association of

College and Research Libraries. The administrator should serve on important committees or task forces in ALA or SLA. Through communications with librarians from other scientific/technical libraries, the administrator's overall understanding of operations in major science-engineering libraries is increased. Valuable formal and informal networks are established. Assuming positions of leadership in these associations, communicating with other administrators, and participating in discussions of relevant policy at the national level enhance the administrator's role as a leader.

Leadership in the Science-Engineering Library

What are the specific leader roles of the administrator of the major science-engineering library? In a practical sense, the administrator is a leader/manager, based on the size of the library and staff and the number of complex programs and services provided by the staff. Depending on the situation, the director serves as a leader and as a manager. Frequently, they are interdependent concepts.

In his study of administrators and managers, Mintzberg discusses the various roles of leaders and managers. (Mintzberg 1980, 166-170) Together, the ten roles make up a "gestalt" - an integrated whole. These are applicable to the administrator of the science-engineering library, some directly and others indirectly. The

director "falls" in and out of the different roles as the situation changes.

The interpersonal roles are based on authority and status. As a figurehead, the director participates in selected social and ceremonial duties. In a library setting, attendance at different social functions is important, especially for an administrator who is responsible for a library or collection external to the main library. Appearances at these social affairs promote visibility and facilitate communicative efforts at formal meetings.

The leader role is the second interpersonal role. In this capacity, the administrator influences the behavior of individuals, groups, and institutions to achieve relevant organizational goals. On an interpersonal level, relationships with subordinates and other administrators are defined by the leader concept. In the large science-engineering library, the administrator needs to serve as leader on a regular basis, directing the activities of professional librarians and classified staff as they progress toward the goals of the library. Necessary organizational changes and innovations are implemented. To provide essential bibliographic services and attain critical organizational goals, the administrator communicates effectively with the individuals and units in the science-engineering library and with other administrative

colleagues who serve on the administrative council for the library system.

The liaison role focuses on activities concerned with individuals or groups external to the science-engineering library. A functional program of faculty liaison promotes communication with the scientific and technical academic departments. The effective administrator develops and cultivates a network of contacts with people and institutions. In this third interpersonal role, the director is concerned with the level of uncertainty in the library's environment. He or she is aware of all relevant environmental elements, with a focus on faculty members and respective academic departments, graduate and undergraduate students, administrative colleagues and corresponding library units, and the associate university librarians and university librarian. Through a network of formal and informal contacts, bibliographic needs of a diverse clientele are determined and necessary organizational requirements for the science-engineering library are articulated to appropriate members of the overall administrative group.

Three informational roles are delineated by Mintzberg. As a monitor, the administrator receives synthesized information on internal operations, external events, and possible trends. Some analysis of the data is necessary and should be performed by selected members of the staff. Administrative decision making is

enhanced if accurate and reliable information is available.

Two additional informational roles are disseminator and spokesman. The director must insure the dissemination of relevant information throughout the library. In the science-engineering library, information on activities in and policies originating from the main library needs to be distributed to all appropriate personnel. As spokesman, the administrator interacts with important constituents in the library's environment, transmitting information to individuals and groups. Important "influencers" are informed. These may be upper-level administrators such as associate university librarians, other library department heads, or key administrators in scientific and technical academic departments.

The need for an open "information system" is the basis of success in the director's informational roles. Subordinates and other administrators need to feel confident in the director's ability to receive and transmit information with accuracy and clarity. The necessity of communicating effectively is accented. For the director of the major science-engineering library, the flow of accurate information in and out of the library is critical to the formulation and implementation of good policy for effective programs and services.

Strategy is developed through four decisional roles. As

entrepreneur, the administrator is responsible for the initiation and design of controlled change in the library. He or she deals with a variety of issues and related problems. Hopefully, as knowledge and insight are applied, opportunities for positive change and eventual innovation arise and are seriously considered for implementation.

Occasionally, it is necessary for the administrator to "take charge" when the science-engineering library encounters a major disturbance. While the role of disturbance handler may be delegated to another appropriate member of the staff, depending on the particular problem, the director must be an effective problem solver. After or during a period of intense activity, especially activity attached to change or innovation, this decisional role may be emphasized. In the major science-engineering library, for example, an extensive serials review and cancellation project generates considerable stress as a result of the perceived importance of all periodical literature. Problem solving techniques, as important communicative tools, may need to be employed to provide essential direction for the staff.

The resource allocator oversees the allocation of all physical and human resources. This is a sensitive political process. While the overall allocation process varies from one library system to another, the administrator of the science-engineering library usually participates in this process initially as a

member of the administrative council and then as the primary allocator for the science-engineering library. Due to the sensitive nature of allocation procedures, the necessity of communicating with colleagues over relative priorities is emphasized.

The fourth decisional role is concerned with the process of negotiation. As a negotiator, the administrator interacts with individuals and units external to the science-engineering library. In addition to the main library, negotiations with other libraries and collections proceed on a regular basis. Such deliberations are critical for the major science-engineering library. Special care and consideration need to go into these negotiations to maintain effectual relationships with other library departments and to insure that necessary resources are allocated to support primary bibliographic services in the science-engineering library.

All of the above roles are interdependent. One role tends to merge into other roles, depending on the individual and the situation. A leader will move in and out of these roles on a daily basis. The transition from one role to another is facilitated by the individual's general communicative skills. As the administrator provides direction and focus for the staff of the science-engineering library, he or she may be a leader or a leader/manager at any particular time. If the size of the staff

is sufficient, many standard managerial tasks can be delegated, enabling the administrator to direct overall operations from a leader's perspective. If the size of the staff is insufficient, then the administrator's capacity to delegate responsibility for specific duties is adversely affected. When this occurs, the administrator must direct activities as a leader/manager.

Concluding Commentary

The major science-engineering library is unique. As a physical library, it is larger than many college libraries and some university libraries. Still, this library is usually one of several components in a large library system. In general, all bibliographic services are provided. Activities associated with collection development are considered to be very important.

As a result of the relative position of the library, effective leadership is required to provide a sense of direction for the staff and to represent the library as a major component within the library system. The ability to communicate with diverse individuals and formal groups serves as a basis for this leader. Quality in decision making is enhanced if the administrator (or leader) is able to communicate, synthesize, and then decide. The effective leader employs proficient communicative skills, including active listening, to represent the interests of the science-engineering library and to lead the library and immediate

colleagues in appropriate directions.

In a realistic sense, the major science-engineering library is a microcosm of the main library. On a somewhat smaller scale, many of the same programs and services are provided. The basic administrative skills required to administer primary activities and operations are similar for both library directors. All of the fundamental administrative roles and responsibilities are assumed by the director of the science-engineering library. He or she administers a large "decentralized" library in an extensive library system. Accordingly, a possible lack of administrative autonomy will occasionally impede efforts to execute particular duties. This can evolve into a significant problem if the director fails to provide effective leadership consistently. Good communicative skills and an astute awareness of relevant social and political factors are requisites for the capable leader.

REFERENCES

Warren Bennis, The Leaning Ivory Tower (San Francisco: Jossey-Bass Publishers, 1973).

Keith Davis, Human Behavior at Work, 5th ed. (New York: McGraw-Hill Book Company, 1977).

John Gardner, The Nature of Leadership: Introductory Considerations (Washington, D.C.: Leadership Studies Program, Independent Sector, 1986).

Henry Mintzberg, The Nature of Managerial Work (Englewood Cliffs, N.J.: Prentice-Hall, 1980).